

CLINICAL PROFILE, RISK FACTORS AND OUTCOME OF COMMUNITY ACQUIRED PNEUMONIA AMONG CHILDREN IN A TERTIARY CARE HOSPITAL

OBJECTIVE :

1. To identify the clinical presentation and risk factors of community acquired pneumonia.
2. To identify the etiological profile of Community acquired pneumonia.
3. To analyse the outcome of Community acquired pneumonia in children under 5 years.

METHODOLOGY :

A descriptive study included 100 Children at the department of Pediatrics, Chengalpattu Medical College and Hospital , Chengalpattu in the study period of august 2015 to September 2016. All children with bronchopneumonia admitted in the pediatric ward were analysed for symptoms, risk factor, complications and outcome of community acquired pneumonia.

Inclusion criteria :

- Children with clinical and/or radiological evidence of pneumonia at admission in the age group 1 month to 12 yr with cough or difficult breathing with any of the following:

1. Fast breathing

2 Months – 2 years >50/mt

2 years – 5 years >40/mt

5 years to 12 years >30/mt.

2. Chest in drawing.

3. Strider in calm child.

4. Grunting.

5. Lethargy.

6. Convulsion.

7. Inability to drink.

Exclusion criteria :

- **Children with nosocomial pneumonia.**
- **Children treated elsewhere for pneumonia but whose details of treatment are not traceable.**

Procedure /maneuver :

1. Children between 1 months –12 yr admitted with suspected pneumonia, if satisfying the inclusion criteria were enrolled into the study group and admitted or given treatment based on the illness severity as assessed by IMNCI classification or as the physician decides.
2. Get parental consent.
3. All children were assessed during the course of illness and managed according to the standard protocol.
4. Pulse oxy meter reading of each patient is recorded.
5. Respiratory parameters and vital signs as in data collection form are documented.
6. Chest X ray, complete blood count, blood culture and urine culture were done with in 24 hrs of admission.
7. Chest X ray was interpreted by a radiologist who was blinded about the study based on WHO guide lines for interpretation of X rays in paediatric pneumonia.
8. Treatment, investigations and the disease course as per data collection form are documented.
9. Follow up until discharge or death.

CONCLUSION :

In this descriptive study, 100 children with community acquired pneumonia were analyzed for clinical presentation ,complications and outcome.

The following is the conclusion

1. There was no significant gender difference seen among children with pneumonia.
2. 43% of were infants in this study group.
3. Fever ,cough,breathing difficulty and vomiting were the most common presenting features.
4. Poor feeding and altered sensorium were common in infants
5. Of all Children 11 had pneumonia and 89 had severe pneumonia
6. None in this study had vaccination for pneumococcus
7. Wheeze as a common co morbid condition was seen in 10% of the children
8. NICU admission ,congenital heart disease ,previous admission for pneumonia were the common risk factors associated with pneumonia.
9. More than 50% of the children had antibiotic usage as a prehospital therapy

10. Complications encountered were hypoxia, shock, empyema, pleural effusion, dyselectrolytemia and acidosis.
11. Mechanical ventilation was needed in 15% and most of them were infants (73%). All 15 children had severe pneumonia.
12. Culture positive sepsis with MRSA was seen in one child
13. Positive throat swab culture and sensitivity was seen in 3 children, of which 2 of them were found to have streptococci pneumonia. one child had pneumatocele suggestive of staphylococcal pneumonia.
14. Antibiotic therapy using single drug was seen in 54% of children.
15. Age <1 year, hypoxia, poor feeding, presence of shock, need of inotropes were identified as risk factor for need of mechanical ventilation among children with pneumonia.
16. Overall mortality was 2 %.